

# IRF630F

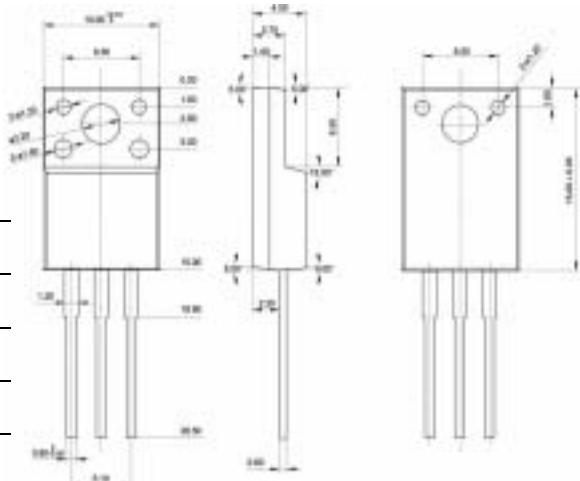
N-channel mosfet transistor



## ◆ Features

- With TO-220F package
- Low on-state and thermal resistance
- Fast switching
- $V_{DSS}=200V$ ;  $R_{DS(ON)}=0.4\Omega$ ;  $I_D=9A$
- 1.gate 2.drain 3.source

1 2 3



TO-220F

## ◆ Absolute Maximum Ratings Tc=25

| SYMBOL    | PARAMETER                           | RATING   | UNIT |
|-----------|-------------------------------------|----------|------|
| $V_{DSS}$ | Drain-source voltage ( $V_{GS}=0$ ) | 200      | V    |
| $V_{GS}$  | Gate-source voltage                 | $\pm 20$ | V    |
| $I_D$     | Drain Current-continuous@ $T_c=25$  | 9        | A    |
| $P_{tot}$ | Total Dissipation@ $T_c=25$         | 35       | W    |
| $T_j$     | Operating Junction temperature      | 150      |      |
| $T_{stg}$ | Storage temperature                 | -65~150  |      |

## ◆ Electrical Characteristics Tc=25

| SYMBOL        | PARAMETER                        | CONDITIONS                    | MIN | MAX       | UNIT |
|---------------|----------------------------------|-------------------------------|-----|-----------|------|
| $V_{(BR)DSS}$ | Drain-source breakdown voltage   | $V_{GS}=0$ ; $I_D=0.25mA$     | 200 |           | V    |
| $V_{GS(TH)}$  | Gate threshold voltage           | $V_{DS}=V_{GS}$ ; $I_D=1mA$   | 2   | 4         | V    |
| $R_{DS(ON)}$  | Drain-source on-stage resistance | $V_{GS}=10V$ ; $I_D=5.4A$     |     | 400       | m    |
| $I_{GSS}$     | Gate source leakage current      | $V_{GS}=\pm 20V$ ; $V_{DS}=0$ |     | $\pm 100$ | nA   |
| $I_{DSS}$     | Zero gate voltage drain current  | $V_{DS}=200V$ ; $V_{GS}=0$    |     | 10        | uA   |
| $V_{SD}$      | Diode forward voltage            | $I_F=9A$ ; $V_{GS}=0$         |     | 1.2       | V    |